CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

S-E-C-R-E-T

25X1

COUNTRY	Czechoslovakia	REPORT	25X1
SUBJECT	Antonin Zapotocky Plant of the Lisen Precision Engineering Works in Lisen	DATE DISTR.	11 April 1955
		NO. OF PAGES	9
DATE OF INFO.		REQUIREMENT NO.	RD 25X1
PLACE ACQUIRED		REFERENCES	

This is UNEVALUATED Information

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
THE APPRAISAL OF CONTENT IS TENTATIVE.
(FOR KEY SEE REVERSE)

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1. The Antonin Zapotocky Plant of the Lisen Precision Engineering Works (Zavody presneho strojirenstvi Lisen), National Enterprise, in Lisen (N 49-12, E16-42) is located about 1 kilometer east of the outskirts of Brno, on the south side of the road from Brno to Lisen. On the north side, the factory area is bounded by the Brno-Lisen road. The south boundary is formed by the Brno to Lisen double-track electric railroad. To the west and east are fields. The area is about 650 meters wide, along the road, and 700 meters long, between the road and the railroad line. It is fenced with wire netting about two meters high.

2. The plant produces models Zetor 25 and Zetor 30 tractors; it also engages in experimental production of the Zetor 35 tractor. This latter has not yet gone into mass production. Output figures are not known since employees in other departments have no access to the tractor-production department.[1] The plant also produces ball, roller, and conic (tapered) bearings.

3. The following types of tapered bearings are made:

30205	30206	30207	30208	30209	30210	30211	30212
30213	30214	30217	30219				
30302	30303	30304	30305	30306	30307	30308	30309
30310	30311	30312	30314				
31306	31308	31309	31310				
32305	32307	32312					

In the above numberings, 30200 indicates a thin outer wall, narrow ball race, medium tapering angle of cone (30°);
30300 indicates a thick outer wall, narrow ball race, small tapering angle (14°);
31300 has a thick wall, narrow ball race, large tapering angle (45°);
32300 has a thin wall, a wide ball race and small tapering angle (14°).
The last digit (1,2,3-) indicates the size of the bearing. No. 3 has a diameter of about 5 cm., No. 10 of about 13 cm. Ball and roller bearings have the same system of marking but what exactly they indicate is not known 25X1

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STATE	X	ARMY	X	NAVY	X	AIR	X	FBI		AEC					

(NOTE: Washington distribution indicated by "X"; Field distribution by "#".)

4. The daily production figures for tapered bearings may be estimated at about 5,600, considering the capacity of the machines for grinding the faces of the bearings. Each machine makes about 1,000 per shift and works two shifts. About 400 are rejects. The types of bearings produced in the greatest quantities are: 30302, 30303, 30304, 30305, 30203, 30206, 30207. Total production of bearings is not known. It is estimated at about twice as many as are produced in production hall No. 4.(Annex B)

5. Iron bars, used for instance, for the manufacture of ball races, come from the Gustav Kliment Pipe Rolling Mills at Chomutov (N 50-27, E 13-26). The origin of other raw materials used at the plant is not known. All finished products, including tractors, are taken away by rail. Bearings and tractors are mostly exported to other Satellite countries.

6. The plant employs about 3,500 employees, of whom about 1,000 are women who are employed mainly at the automatic machines or checking. There are about 80 apprentices receiving practical training in a newly constructed building. Grading, drainage work, and similar jobs are done by about 25 prisoners who are brought in every day by truck. Two eight-hour shifts are worked in the plant. Some production halls work morning and afternoon, some morning and night, and some afternoon and night. Work is spread out this way because of the poor electric-power supply. Absenteeism is estimated at about 10 percent of the employees. Most of them injure themselves in some way to have a reason for absence, and most of them are young people. On fine days many Lisen employees with bandaged hands are to be seen in Brno.

7. The average monthly fulfillment of the plan is 87 percent, principally because of the shortage of materials, in particular iron bars. Since the end of 1952, there has also been a perceptible shortage of power, which is cut off frequently for two or three hours, so that the whole plant stops working. Grinding wheels are of very poor quality, wear out very quickly, and often break. The metal bars delivered are mostly too soft, so that many of the bearings break when they are tempered. Tool steel for blades for the lathes is also of poor quality. It often bends or breaks the first time it is used. About 17 percent of the total production of bearings are rejects, mostly on the machines which grind the ball races. Many workers are inexperienced.

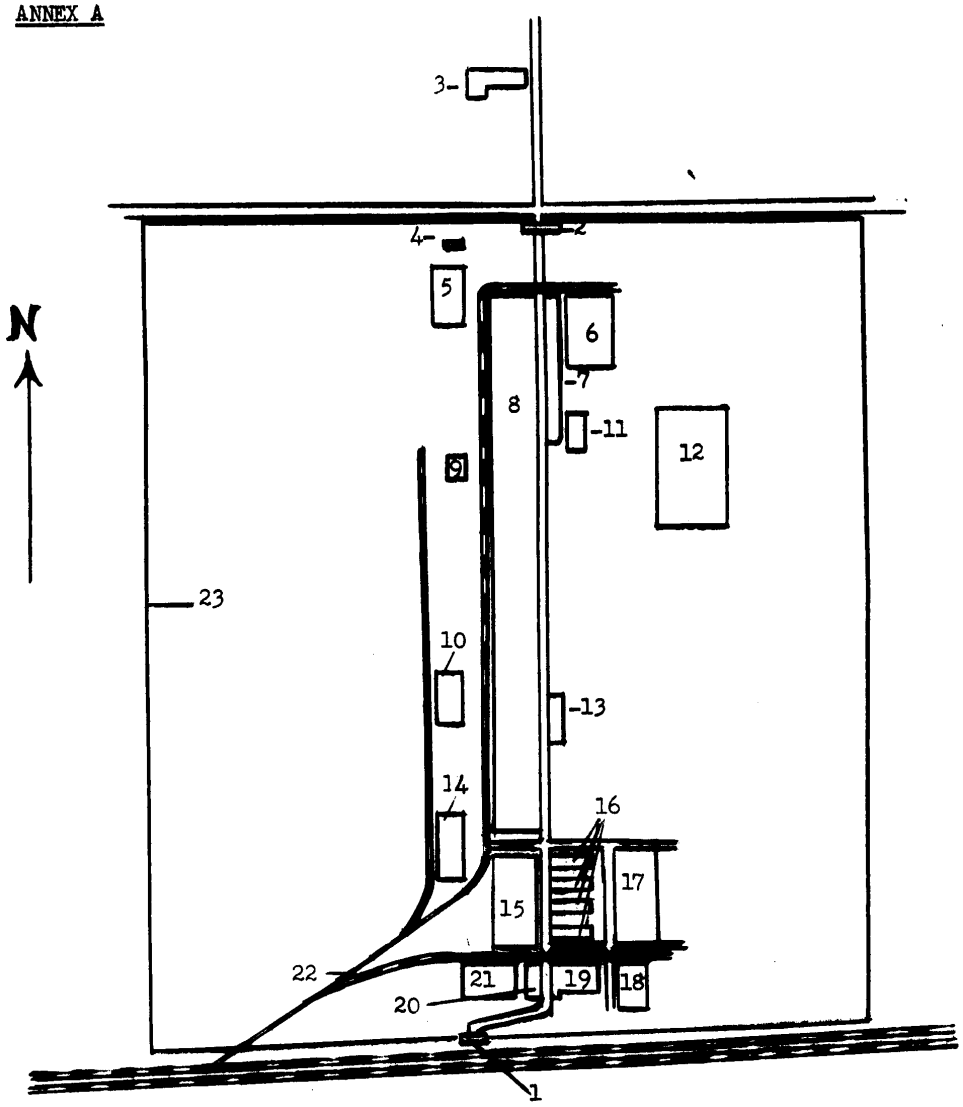
8. Until July 1953 factory passes were green with no photographs. In July new passes with photographs were issued, white, with a green band about three centimeters wide on the lower edge. In addition, each worker must have a type-written declaration, on white paper about 12 x 8 centimeters in size, authorizing him to enter any given production hall. Some employees, such as fitters, have permission to go into all the halls. Passes must be shown to the gatekeeper at the entrance of each hall, both going in and coming out, and no one can get into any of the halls without permission. These authorizations are issued by the Security Office, situated in a new building outside the factory. The foreman or the head of the workshop must accompany any worker going to the Security Office.

9. There is a guard of four men at both gates checking passes and sometimes slapping pockets to check whether anything is being taken out. In the evening, two or three members of the works guard patrol the fence with a dog.

10. The most active political organizations in the factory are the Czechoslovak Youth Movement and the Communist Party. These organizations hold meetings regularly twice a week. There are also ten-minute talks every day, always in the middle of a shift, for all those working in the hall; the talks are given by some good Communist.

1. [redacted] Comment. According to an announcement of CTK on 9 February 1955, this factory has developed a new medium-weight farm tractor, the T-35, and small-scale production is already under way. 25X1

ANNEX A



Antonin Zapotocky Plant of the

Lisen Engineering Works in Lisen

Scale 1:5,000

For legend, see next page -

Legend to Annex A:

1. No. 1 entrance for pedestrians coming from the railroad stop; brick, two-story, 20 x 5 meters in size. Between this and the waiting room there are textile and food stores.

2. Gatekeeper's lodge for No. 2 entrance, which is for both pedestrians and trucks; the lodge is a brick building, 35 x 8 meters in size.

3. Central offices for the whole factory, in a two-storied, L-shaped building, the main part 50 meters long and 15 meters wide, the south wings 10 meters long and 15 meters wide, finished in summer 1953, situated about 100 meters north of the gatekeeper's lodge for No.2 entrance.

4. Joinery shop, wooden, single-story building, 15 x 7 meters.

5. Production hall No. 1; a ferroconcrete building with a flat roof and skylights, 50 x 25 meters. Formerly there were repair workers in this building, but these are now distributed in other places of work. It is not known whether or not an apprentice center has remained in this building.

6. Workshops for the apprentices, in a new building finished in autumn 1952. A two-story, masonry building, 60 x 40 meters. On the ground floor there is a workshop with machines, such as lathes. On the second floor handwork is taught.

7. Offices (accounts) and cloakroom, in a single-story, masonry building 125 x 10 meters. The offices are in the south part of the building.

8. Hall, containing some offices, checking room and polishing room for balls and tractor assembly shop, single-story, 450 x 40 x 10 meters. This is really two halls joined by an annex, formerly halls No. 2 and 3. They were joined in 1953.

9. Garage for industrial trucks and tractors. Masonry, single-story building, 20 x 15 meters, containing two Skoda 5½-ton trucks, nine industrial trucks, two Zetor-25 tractors, and one industrial tractor for moving machinery.

10. Stores for tools, grinding wheels, machine-tool blades, etc. Single-story building, 45 x 25 meters.

11. Kitchen and works canteen, single-story, 30 x 15 meters.

12. Tractor shop for production of all parts of tractors. A new building finished in autumn 1952. Ferroconcrete, 100 x 60 x 12 meters.

13. Cloakrooms and washrooms, single-story building, masonry, 40 x 10 meters.

14. Production hall No. 8, containing stores for material, iron bars for bearings production. Ferroconcrete building, 55 x 25 x 10 meters.

15. Production hall No. 4, where bearings are made. Ferroconcrete building, 80 x 40 x 8 meters. (See Annex B)

16. Cloakrooms and washrooms, in four masonry buildings, 35 x 10 meters each. The two in the north are for hall No. 4 and the two in the south for hall No. 5.

17. Production hall No. 5 for production of ball bearings, roller bearings, and tapered bearings. Ferroconcrete building, 80 x 40 x 8 meters.

18. Production hall No. 32: a masonry, three-storied building, 40 x 25 meters in size, containing the main checking and assembly shops for bearings. The assembly shop is on the ground floor. On the second floor is the checking room for finished bearings, on the third floor the checking room for ball bearings.

19. Tempering shop and checking shop for tempered parts. Ferroconcrete hall, 40 x 25 x 12 meters in size. The south wing, containing the checking room, is 12 x 6 x 4 meters in size.

20. First-aid post and fire-fighting apparatus. The first-aid post is in the northern and the fire-fighting apparatus in the southern part of the building, which is a single-story masonry building, 30 x 10 meters in size.

21. Boiler house, for heating the factory and the water in the washrooms; a two-story building, 45 x 30 meters in size.

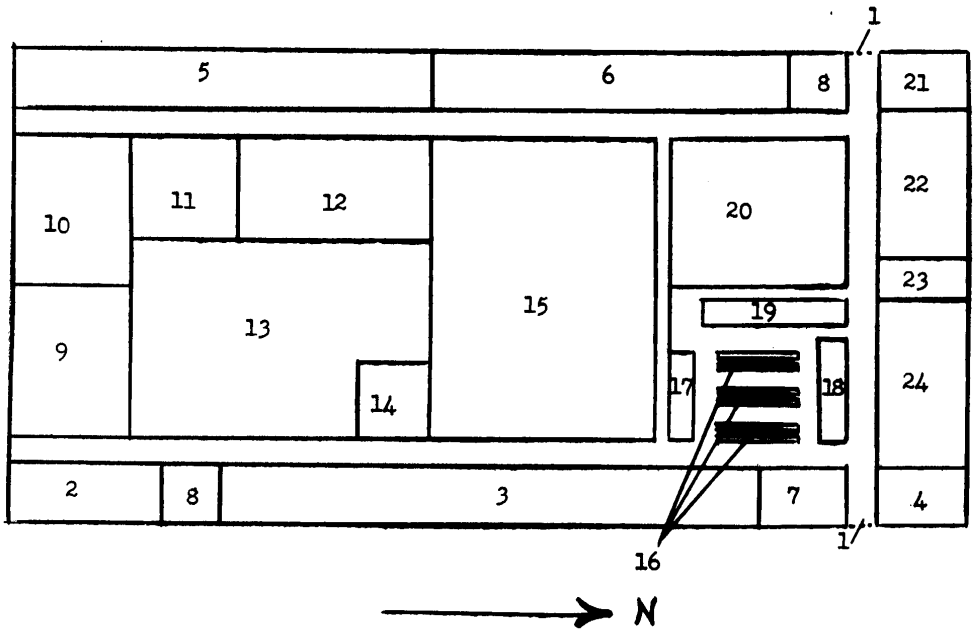
22. Siding, electric, branching off from the Brno-Lisen double-track electric railroad.

23. Fence of wire netting, two meters high.

ANNEX B

Production Hall No. 4

(Scale 1:500)



For legend, see next page -

Legend to Annex B: Production Hall No. 4 (Annex A, Point No. 15)

1. Entrances.
2. Accounts department; departmental wages office.
3. Offices of the works foreman, planning, piece-work, and personnel departments.
4. Office for the assembly of bearings.
5. Issuing shop for gauges and measuring instruments.
6. Issuing shop for instruments, tools, and utensils.
7. Canteen for the production hall.
8. Lavatories for the production hall.
9. Open space where there are about 15 old German revolving lathes in good condition.
10. Three saws for cutting material, electric, German, old, but well maintained.
11. Four machines for making balls from wire; old, of German make, well maintained.
12. Place where material is kept for cutting and making balls.
13. Thirty-five automatic lathes for making outer and inner parts of the ball races for ball, roller, and tempered bearings. Older,German make, good condition.
14. Twelve automatic lathes for making outer and inner part of the ball races for small bearings (up to about 70 mm.diameter)and for making balls.
15. Checking shop for semifinished products and temporary store.
16. Thirty-five semiautomatic machines for grinding the circular path for the inner wall of the ball race of the bearing. Machines are of Czech Zetka make, mostly delivered in 1954.
17. Three grinders, semiautomatic, for grinding the surface of the outer bearing wall; rather old German make.
18. Three Unger machines, German make, for grinding the head of the inner part of the ball race of tapered bearings. Next to these are two semiautomatic Soviet machines, doing the same job; both kinds of machines are in good shape.
19. Seven machines, of Volman make, for grinding the inner surface of the outer part of the bearing, for tapered bearings. The machines are old but good.
20. Space surrounded with wire netting, containing maintenance and tool shop.
21. Store for finished bearings.
22. Twelve grinding machines for grinding cones; rather old, German machines.
23. Two lathes for making individual parts which are not mass-produced.
24. Assembly of bearings; three presses for stamping the bearings.